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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/675,276

09/29/2003

Raj L. Bandekar

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EXAMINER

DALEY, CHRISTOPHER ANTHONY

ART UNIT

PAPER NUMBER

2111

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/12/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/675,276

Applicant(s)

BANDEKAR ET AL.

Examiner

Christopher A. Daley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-30 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-9, 11-19, 21-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Christensen et al (US6618745) hereinafter Christensen in view of Edlund et al (US6085227) hereinafter Edlund.
4. As to claims 1, 11, and 21 Christensen discloses A method, computer readable medium, and system of providing a connection between;
establishing a connection between said first device and second device (Figure 5 illustrates connection manager 28 that comprises function block manager 116 that comprises said connection information, COL. 11, line 48 – COL. 12, line 52);
storing in a third device a first plurality data elements necessary for re-establishing said connection (Link device 28 comprises said information for re-establishing said connection, COL. 7, lines 25 – 30) ; receiving a second data element when said second device is reinitialized, wherein said second device data element is contained in said second device after said second device is reinitialized (When there are any changes in the communication of said second device, such as what transpires in reinitialization, the

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link devices manages said information, COL. 7, lines 25 – 30); and reestablishing said connection between said first device and said second device after said reinitialization by modifying at least one parameter value in each of said first device and said second device based on said first plurality of data elements and said second data element (The execution times, connection status (changing parameters) of the different field devices attached to bus 30 of Figure 1 is stored in the linking device 28, COL. 7, line 63 – COL. 8, line 5);

Christensen does not explicitly disclose a first device and a second device, contained in a process automation, said process automation system also containing a host controller designed to control operation of said first device and said second device, wherein each of said first device, and said second device is implemented as a separate physical unit from said host controller, said method comprising: establishing said connection between said first device and said second device.

However, Edlund teaches a first device and a second device, contained in a process automation, said process automation system also containing a host controller designed to control operation of said first device and said second device, wherein each of said first device, and said second device is implemented as a separate physical unit from said host controller, said method comprising: establishing said connection between said first device and said second device (Figure 1 illustrates a system comprising a network with a network 100 that couples remote field devices such as 106. A plurality of remote devices are possible, although illustration only shows one. Said devices are in a different physically location that the remote device they control, COL. 2, lines 39 -

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67). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the network of Edlund in the system of Christensen as it provides a cost effective means of connecting remote device and provide a central controller, COL. 2, lines 30 – 36. One of ordinary skill in the art would have been motivated to use the network of Edlund in the system of Christensen as it provides a cost effective means of connecting remote device and provide a central controller, COL. 2, lines 30 – 36.

5. As to claims 2, 12, and 22 Christensen discloses The method, medium, and system wherein said second device contains a plurality of objects providing said connection, wherein said second data element comprises an index indicating a memory location where one of said plurality of objects is stored (Figure 2 illustrates the detailed components of a field bus device. Said function blocks comprises said index where plurality of objects are stored, by field bus protocol, COL. 6, lines 50 – 55).

6. As to claims 3, 13, and 23 Christensen discloses The method, medium, and system wherein said plurality of objects comprises a link object and a virtual communication relationship (VCR) object, wherein said link object provides a link between said VCR object and a location storing an application data exchanged between said first device and said second device, and said VCR object provides a link to another VCR object in said first device (Said information is specified , COL. 6, lines 55 – 65).

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7. As to claims 4, 14, and 24, Christensen discloses The method, medium, and system wherein said second device comprises a publisher and said first device comprises a subscriber, said first device and said second device being contained in a control system, said second device containing a second function block to generate said application data and said first device containing a first function block to receive said application data, and wherein said index specifies a memory location where said second function block is located after said second device is initialized (Said limitation covered, COL. 9, lines 23 – 35).

8. As to claims 5, 15, and 25 Christensen discloses the method, medium, and system wherein said reestablishing comprises modifying a local index field in said link object according to said index (Said information is sent to the link device by the field device, COL. 9, lines 53 – 63).

9. As to claims 6, 16, and 26, Christensen discloses The method, medium, and system wherein said third device comprises a supervisory control station, said method further comprising maintaining a copy of said link object in said supervisory control station, wherein said modifying comprises changing said local index field in said copy and downloading said copy to said second device (Link device 28 is illustrated in detail in Figure 5. Said information is downloaded in field device manager 114, COL. 13, lines 44 – 47).

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10. As to claims 7, 17, and 27, Christensen discloses The method, medium, and system further comprises maintaining in said supervisory control station a catalogue of connections from/to each of said function blocks, wherein said copy is identified according to said catalogue (The connection manager of the link device of Figure 5 performs said function, COL. 13, lines 31 – 43).

11. As to claims 8, 18, and 28 Christensen discloses The method, medium, and system further comprising modifying a remote index field in a link object contained in said first device (Figure 2 illustrates controller 18, which comprises algorithms to respond to modifications, COL. 5, lines 1 – 15).

12. As to claims 9, 19, and 29, Christensen discloses The method, medium, and system wherein said second device comprises a subscriber and said first device comprises a publisher, said first device and said second device being contained in a control system, said second device containing a second function block to receive said application data, and wherein said index specifies a memory location where said second function block is located after said second device is reinitialized (Figure 2 illustrates a control system, comprising a first device controller 18, and a second device field device 22. Said IDs are also specified, COL. 5, line 55 – COL. 6, line 5)

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 10,20, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Christensen in view of Edlund and in further view of Christensen et al (US2002/0083364) hereinafter Christensen2.

15. As to claims 10,20, and 30 Christensen as modified by Edlund does not disclose the method, medium, and system wherein said device comprises a replaced unit.

However, Christensen2 teaches of a field device, which serves as a replacement device to replace a disabled device as illustrated in Figure 1 with bus 34 having a redundant tree to replace disabled devices, page 3, paragraph 0027 – page 4, paragraph 0030). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the replacement device of Christensen2 in the system of Christensen as Christensen2 allows for the smooth transition to a backup system, when a dev ice becomes disabled, page 1, paragraph 0008. One of ordinary skill in the art would have been motivated to use the back up system of Christensen 2 in the system of Christensen to allow for the smooth transition to a backup system, when a dev ice becomes disabled, page 1, paragraph 0008.

Response to Arguments

16. Applicant's arguments with respect to claims 1, 11, and 21 have been considered but are moot in view of the new ground(s) of rejection. With regards to the applicant's argument that prior art does not teach the amended limitation of a first device and a second device, contained in a process automation, said process automation system also containing a host controller designed to control operation of said first device and said second device, wherein each of said first device, and said second device is implemented as a separate physical unit from said host controller, said method comprising: establishing said connection between said first device and said second device.

Edlund teaches a first device and a second device, contained in a process automation, said process automation system also containing a host controller designed to control operation of said first device and said second device, wherein each of said first device, and said second device is implemented as a separate physical unit from said host controller, said method comprising: establishing said connection between said first device and said second device (Figure 1 illustrates a system comprising a network with a network 100 that couples remote field devices such as 106. A plurality of remote devices is possible, although illustration only shows one. Said devices are in a different physically location that the remote device they control, COL. 2, lines 39 - 67).

receiving a second data element when said second device is reinitialized, wherein said second device data element is contained in said second device after said second device is reinitialized (When there are any changes in the communication of said second

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device, such as what transpires in reinitialization, the link devices manages said information, COL. 7, lines 25 – 30); and reestablishing said connection between said first device and said second device after said reinitialization by modifying at least one parameter value in each of said first device and said second device based on said first plurality of data elements and said second data element (The execution times, connection status (changing parameters) of the different field devices attached to bus 30 of Figure 1 is stored in the linking device 28, COL. 7, line 63 – COL. 8, line 5);

With regards to the applicant's argument that prior art does not teach the amended limitation:

receiving a second data element when said second device is reinitialized, wherein said second device data element is contained in said second device after said second device is reinitialized (Christensen teaches that When there are any changes in the communication of said second device, such as what transpires in reinitialization, the link devices manages said information, COL. 7, lines 25 – 30); and reestablishing said connection between said first device and said second device after said reinitialization by modifying at least one parameter value in each of said first device and said second device based on said first plurality of data elements and said second data element (Christensen teaches that the execution times, connection status (changing parameters) of the different field devices attached to bus 30 of Figure 1 is stored in the linking device 28, COL. 7, line 63 – COL. 8, line 5);

Conclusion

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher A. Daley whose telephone number is 571 272 3625. The examiner can normally be reached on 9 am. - 4p m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 571 272 3632. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CAD
2/6/2007



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